

Under the Influence of Web 2.0

Heather Phillips

April 21, 2009

Under the Influence of Web 2.0

Avril Lavigne's music video of her hit song "Girlfriend" is the most viewed video of all time on YouTube, a popular video sharing Web site that utilizes Web 2.0 technology, with a total of 117,808,765 views (YouTube.com)¹. More than a hundred million people from around the world took the time to watch the 3 minute and 48 second music video. The video has over three hundred thousand text comments. Millions of views and thousands of comments would be expected for a music video from a popular artist. However, even the 5th most viewed YouTube video of all time, "Charlie bit my finger – again," has nearly 90 million views and was most likely posted by the featured children's parents. YouTube, utilizing Web 2.0 technology, has transformed the way that people connect and share ideas and information.

However, it is not just YouTube; some of today's most popular Web sites, such as MySpace and Facebook, use Web 2.0 technology. Web 2.0 technology, the services² it makes possible, and its core components are collectively known as Web 2.0. Web 2.0 has changed the way that people interact online. People are doing more than just seeking information from the Web, they are contributing to it, and are staying connected to people they care about in more dynamic ways. Any medium that can steal 117,808,765 views worth of attention from people deserves some investigation.

Web 2.0 also deserves examination because it is fairly new, having taken off around 2001, is constantly improving, and is part of daily life for many people. As the percentage of

¹ Avril's video was added on February 27, 2007 and accumulated the above number of views between then and March 29, 2009.

² Web 2.0 services are usually network based allowing people to connect with others and upload content to share. Common Web 2.0 services are MySpace, Facebook, YouTube, Twitter, Flickr, Amazon, and Google.

people using these services continues to increase it is important to understand how a tool so widely used may be affecting human nature. The more this technology becomes ingrained into everyday life, the younger the users will be when they start using it. It is important to discover the consequences this media use can have on young adults during the critical stages of their development. As I learned from my college freshman roommate, some Web 2.0 services can be slightly addicting. She probably spent half of her waking day on Facebook that year. She and other people aged between 13 and 22, young adults, are in a period of transition, whether it is learning to be independent from parents or trying to decide on life goals. This transitional period is a time full of questions when young adults are in the process of forming their identity and shaping their behavior around that sense of self. People in this age group are responsible for a large portion of the Internet's traffic and are likely to be frequent users of Web 2.0 services, such as social networking sites because of their convenience for socializing (Jones & Fox, 2009, p. 6). It is important to uncover the influences of Web 2.0 on these users because they are likely to be easily influenced by using these services.

Additionally, it is essential to understand how this technology and the services it provides are affecting young adults to ensure that they and future generations are using it in a responsible way. In 1965, the U.S. Congress declared, "democracy demands wisdom and vision in its citizens and it must therefore foster and support a form of education designed to make men masters of their technology and not its unthinking servants" (Public Law 89-209, 1965: 845). In order to accomplish Congress' vision of democracy with respect to technology we must analyze our media use and its effects. With this paper I hope to illustrate through the remediation theory how the implementation of Web 2.0 Internet technologies is influencing young adults' identity formation and social behavior.

A starting point for exploring the possible consequences of Web 2.0's influence on young adults is to take a deeper look into what Web 2.0 means. Web 2.0 is a term that rose out of the dot-com burst in 2001 when many online businesses failed. Although this downfall caused some to believe the Web would not have an important role in society, Tim O'Reilly, founder and CEO of O'Reilly Media, realized "companies that had survived the collapse seemed to have some things in common" and these commonalities could be a turning point and a new start for the Web (O'Reilly, 2005). The aspects of the companies that survived the bubble burst illustrate the meaning of Web 2.0 and the possibility of success for online businesses. In his foreword to Amy Shuen's online book, *Web 2.0: A Strategy Guide*, O'Reilly proclaims that Web 2.0 is "ultimately about harnessing network effects and the collective intelligence of users to build applications that literally get better the more people use them" (Shuen, 2008). Many Web sites that survived the Web's initial downfall became known as Web 2.0 sites, including Google and Amazon, and set the basic standards for Web 2.0. The components those sites have, as do most other Web 2.0 sites today, include providing a service, usually for free, and collecting user generated content to form networks (O'Reilly, 2005). Some popular Web 2.0 sites used today are Facebook MySpace, and YouTube because they provide a free service, whether it is keeping up with friends or watching videos, and they allow users to form networks by contributing content and connecting with people.

People are at the center of what Web 2.0 means, which stands in sharp contrast to the original Web model, Web 1.0, that failed. The primary difference between Web 1.0 technology and Web 2.0 technology is that Web 2.0 allows users to generate content whereas the first Web model did not. Giving users power to upload content allows "the Web of connections to grow organically as an output of the collective activity of all Web users" (O'Reilly, 2005). For the first

time in the Web's history everyday users can create networks within and between different Web sites by connecting with others, sharing content and linking to other sites. Conversely, Web 1.0 consisted of Web pages created by technical professionals and was considered a read-only medium that did not allow the user to contribute content (Porter, 2008, p.14). Web 2.0 eliminated the need for technical knowledge. Blogger.com, created in the late 1990's, was one of the forerunners of Web 2.0 because it exemplified how "non-technical users could create text-based content for free" (Kelly, 2008). Blogger allows users to share their thoughts and opinions with the world through blogs, Web logs, which are a dominant aspect of Web 2.0³.

Blogs and other user contributions illustrate the immense variety of content made possible by Web 2.0 that the original Web model did not offer. Self-expression is a common use for many Web 2.0 services, especially blogs and social networking sites, whereas Web 1.0 sites primarily focused on providing information. Although Web 2.0 may increase variety in content, Kelley points out the content users create is becoming more mundane with the advent of services like Twitter,⁴ making it normal to broadcast the insignificant details of life (Kelley, 2008). As people continue to upload content it is likely that the Web will be infiltrated with tales of everyday life. However, such a variety of perspectives accentuates the new Web from the old.

One of the final differences between Web 1.0 and Web 2.0 is the way each platform handles business function online. Web 2.0 sites gain valuable data about users' interests and preferences each time a user contributes content. Web 1.0 did not allow for this data accumulation, therefore most online businesses under this model were not successful. Web 2.0

³ As of March 2007 there were 70 million blogs with 120,000 being added each day (Porter, 2008, p. 19).

⁴ Twitter is a Web site that allows users to broadcast a 140-character length message about what they're doing to all their contacts on the site.

allowed Flickr, an online photo sharing service, to be successful. People who use Flickr often add comments or captions, called tags, to their photos. By analyzing these tags, which provide insight into users' interests and passions, Flickr can "reach [...] users directly with targeted or complementary offers" that correlate with their interests (Shuen, 2008). By contrast, Web 1.0 featured pop up ads that were often disregarded and had no customization aspect. Web 2.0's business functions are more successful partly because personalized ads are "more effective compared to those ads that do not reflect customization" (Kalyanaraman & Sundar, 2006, p. 128). User focused ads illustrate a sharp contrast between the business functions of Web 2.0 and Web 1.0. However, it is the user-centered nature of Web 2.0 that allows this technology to influence identity development in young adults and consequently alter their behavior. The next two sections will explain how it is possible for a communication technology to influence psychological development and provide some background on identity.

The idea of a communication medium psychologically affecting its users is not new. In the 1960's, Marshall McLuhan pushed the idea of media altering culture by transforming "our experience of ourselves and our society" (Baran & Davis, 2000, p. 287). Culture defines the world around people. Therefore, when a medium changes culture, people view the world and their place in it differently resulting in an altered identity to align with the new view point. Some of McLuhan's core ideas are included in the remediation theory, which serves as a basis for understanding how a medium can influence identity development. The remediation process begins with a change, when a "new medium arrives in a culture it creates new or significantly altered sensory input because people are forced to use their senses in new ways or fresh combinations of the old ways" (Turner, 2008). For example, someone watching TV must use his or her senses differently than someone reading a book. Similarly, Web 2.0 sites require the use of

different combinations of the senses, often times requiring the user to abruptly shift between using different senses. Subsequently, when there is a change in how users perceive a medium there is also a change in the way users think. “These reprogrammed senses breed new habits of mind and thought” as a result of strengthening neuron connections in the brain from habitually using the senses in a particular way (Turner, 2008). Using hyperlinks to jump from blog to blog remediates the brain to adapt to abruptly shifting focus from one blog to the next.

The new medium not only remediates thought patterns, but it also realigns the way people think about themselves, which influences identity. A core component of many Web 2.0 sites that shifts the way people think about themselves is interactivity. Interactivity is defined as “the extent to which users can participate in modifying the format and content of a mediated environment in real time,” and makes the user a central component of the Web 2.0 service (Liu & Shrum, 2002, p. 54). Myspace puts users at the center of the service by giving them freedom to add different backgrounds to their pages, embed videos and add music. Interactivity remediates the way people think about themselves because it gives the person a sense of self-importance and control.

Interactivity increases thoughts of self-importance and control because it provides the opportunity to create content and customize the service. Previous media were intended for consumption so the person thought of him or her self as a consumer. Interactivity makes users consumers and producers. Posting a video on YouTube, or similar Web 2.0 activities, make the users think of themselves as the center of attention because they have created something for others to see. Facebook lets users customize the service by choosing what shows up in their

mini-feed⁵. The most control people had over previous media was changing the station, closing the book or recording the program for later viewing. Since “the feeling of being in control [is] considered a desirable psychological state,” the degree of control users have over the Web 2.0 service influences their experience with the service and determines whether or not they are likely to use the site for identity development (Liu & Shrum, 2002, p. 62). At no other time in history has the average user of a medium been both the producer and consumer of the content. Giving users this power is bound to change the way they think of themselves.

The power offered by Web 2.0 services alters thoughts and identities resulting in behavioral changes. “Because we perceive and evaluate our situation differently, we begin to respond to, and interact with it differently” (Turner, 2008). Having the power and control to manipulate the medium will motivate the user to act accordingly by customizing the service or creating content. Some Web 2.0 services provide people with a set of completely new behaviors. Facebook allows its users to bestow fake zombie bites or throw imaginary sheep at each other (Donath, 2008, p. 243). Remediation theory illustrates that as a new communication medium changes the culture, the people within that culture begin to perceive and think differently, which results in realignment of identity. As identity is shifted, people must readjust their behavior. Therefore, remediation theory demonstrates how it is possible for Web 2.0 services to influence identity and social behavior in young adults. However, before digging deeper into the specifics on how this process is occurring today, some more details about identity formation are essential.

Identity formation is a necessary stage of psychological development that allows young adults to better understand themselves, the world and their place in society. Young adults

⁵ The mini-feed is a section of a user’s Facebook home page that updates users about their friends’ Facebook actions.

develop both a social and a personal identity. Social identity formation occurs when young adults find a group they identify with because of shared interests or passions. Developing a social identity makes young people feel as though they are a part of something greater than themselves alone (Buss, 2001, p. 89). Feeling included in a group provides insight about the world from a larger perspective, which helps young adults understand the world around them and their place in it. However, young adults must also form a unique identity that sets them apart from others in order to “pursue individual goals free of social constraints” and to learn independence (Buss, 2001, p. 89). During identity development young adults ask themselves critical questions like, ‘Who am I?’ ‘Who will I be?’ ‘What will I do with my life?’ in order to better understand themselves.

Some aspects of identity are relatively stable, such as race, gender and identification with family members. However, overall identity formation for young adults is an evolving process, “multifaceted and in flux, incorporating old and new images” of the self (Weber & Mitchell, 2008, p. 27). As young individuals experiment with different aspects of their social and personal identity many changes and re-evaluations take place (Buss, 2001, p. 106). Young adults sometimes stray from their normal group of friends to gain alternate outlooks from new acquaintances. New perspectives allow young adults to re-evaluate the world and their place in it, further shaping their identity. Additionally, young adults will take on new activities in order to develop new interests. Self-expression and reflection are essential to identity formation because both help young adults answer critical questions about themselves (Weber & Mitchell, 2008, p. 27). Self-expression accents a young individual’s uniqueness because it reveals an opinion, thought or emotion that is specific to the person. Identity development is an important process to

investigate in relation to Web 2.0 because Web 2.0 services play a major role in the process now that so many young adults use these services⁶ (Lenhart, Madden, Smith, & Macgill, 2007).

Young adults use various methods, including Web 2.0 activities, to shape their identities. Web 2.0 usage develops both the social and personal aspects of identity. Self-expression, which could be writing a blog, uploading a personal video, or sharing photos, and self-reflection, such as thinking about opinions, beliefs and values, mold one's personal identity (Weber & Mitchell, 2008, p. 27). Web 2.0 services facilitate self-expression and reflection activities. Web 2.0 services as self-expression tools give young adults a benchmark for comparison throughout the stages of their identity development because of the capacity to record the process. Recording self-expression through Web 2.0 activities encourages young people to "develop observation skills and a meta-awareness" making it easier for them to reflect on their thought patterns, emotions and beliefs (Harris, 2008, p. 54). Being aware of these aspects about one's self allows young people to be more aware of their individual identity and how it is changing.

Additionally, visual self-expression, customizing MySpace pages or posting photos on Flickr, is "closely linked to the identities that young people are reflecting upon and exploring" and helps them gain perspective about themselves (Weber & Mitchell, 2008, p. 41). Visual elements help young adults reflect from the outside in because they can see themselves the way others see them making young people more aware of how they are presenting themselves and prompting them to ask themselves if the presentation is accurate. Viewing one's self from a different perspective influences personal identity development because it may allow a young individual to think about him or her self more objectively.

⁶ As of December 17, 2009 64% of online teens, aged 12-17, were creating content online.

Visual aspects of Web 2.0 services do more than provide alternate perspectives. Many young adults use the visual capabilities of Web 2.0 sites to embody their personal identity. During the evolution of personal identity formation for young adults, the body remains the center and in some cases the essence of their identity (Weber & Mitchell, 2008, p. 42). Web 2.0 services influence identity because young people use these services, posting photos or videos, to create a self-image. Web 2.0 activities are ideal for developing a self-representation because identities modified with these services, especially social networking sites, are “fluid” (Donath, 2008, p. 237). Young adults can portray themselves however they like and easily adjust their image, furthering the identity exploration process. However, images and videos are not the only aspects of some Web 2.0 services that facilitate embodiment. In a series of studies about young women’s use of social networking sites, it was found that comment posts and blog entries on MySpace are considered forms of identity embodiment that reveal a “tentative experimentation” with different selves (Weber & Mitchell, 2008, pp. 30-31). Web 2.0 sites give young adults an opportunity to present themselves in a more tangible way making the development process more visible and recordable. Being able track the identity process may help young adults better understand who they are.

Gaining insight about one’s self is often achieved through feedback. Feedback provides alternate points of view and is a necessary aspect of identity formation that helps young adults portray an intended self-representation (Weber & Mitchell, 2008, p. 41). Most Web 2.0 services have built in feedback mechanisms such as posting comments, sending messages, or creating response videos. Web 2.0 services are an effective means of accumulating feedback because feedback through Web 2.0 is instantaneous and easily retrievable. Feedback from Web 2.0 services provides an “opportunity for attention and support from others” influencing identity by

introducing new ideas and causing young people to evaluate these ideas in relation to their own (Harris, 2005, p. 53). New ideas are essential for maintaining beliefs, which are important components to one's personal identity.

Not only are Web 2.0 services an efficient way to obtain feedback, but they are also granting young adults some independence they may not be able to achieve in other ways. Gaining autonomy is crucial for healthy personal identity development (Harris, 2005, p. 54). Being independent from parents allows young adults to explore themselves as individuals. Most young people, especially those in their teens who are living at home, have little time for personal activities that are not structured (Harris, 2005, p. 54). Web 2.0 activities such as watching YouTube videos or keeping up with friends on Facebook afford youth some free time to do things independent of parents. It gives young people "control over the discretionary time they do have," increasing their awareness of themselves as independent people (Harris, 2005, p. 54). Further control results from being able to participate in Web 2.0 activities at their convenience because the services are always there and ready to use. As noted earlier, being in control is associated with a positive psychological state, which adds a positive association to using these sites for identity development.

Gaining independence is a major part of forming one's personal identity, but connections with others provide a way for young adults to form a social identity. A sense of security is necessary for healthy social identity development, and feeling secure with one's self and one's identity "comes from knowing that you are not so different from others, that you belong to the group, [and] that you fit in" with others (Harris, 2005, p. 58). Web 2.0, through its inherent network component, offers this sense of security by making it easy for young people to join a group or strengthen ties among already existing peer groups. Groups shape identity by

emphasizing common interests, beliefs and goals. Facebook has a 90's Nickelodeon group with members who share an interest in TV shows aired on Nickelodeon during the 90's (Facebook.com). Anyone in this group can say "I am a person who likes 90's Nickelodeon TV shows!" Similarly, Harris indicates that some blogging services are identified with specific crowds and young people will switch services in order to maintain alignment with a specific group, which he reveals changes occasionally as does a young person's social identity (2005, p. 58). Fitting in with one crowd may be ideal for a time, but the young individual may become bored and want to experiment with other groups.

Once a young adult gains a sense of security within the group, defining status is the next aspect to social identity formation. Social networking sites, and other Web 2.0 services, provide a way for young adults to determine status within the group. Donath finds that exchanging pictures, updating profiles and utilizing applications are ways that young adults signal their status within their group of friends (2008, p.242). Maintaining or gaining status within a group is an important part of social identity formation because it allows the individual to gain better understanding of who they are in relation to the group. A young individual that is willing to take a risk and adopt, for example, a new Facebook application when it first comes out will classify that person as a leader within the group that others will look to for trend setting if the application becomes popular (Donath, 2008, p. 243). Practicing leadership online develops an individual's social identity as a leader.

Status is often controlled through feedback, which is just as important for social identity formation as it is for personal identity formation. Feedback is essential for defining one's social self because it confirms or challenges one's place within the group. Young social networking

leaders take risks by setting trends. When an image, perhaps a Facebook bumper sticker⁷, does not become as popular among friends as the young leader had hoped, feedback from friends may decrease the young individual's status (Donath, 2008, p. 243). Feedback also provides a way for young individuals to confirm the group's interests.

Finally, Web 2.0 services influence social identity through the limitless connectivity these services provide. Web 2.0 alters the conventionally held belief, "one expects people to be similar to their friends" (Donath, 2008, p. 235). Some social networking sites and other Web 2.0 services make it easy to gain social connections with unknown people, so having similar friends may no longer be the case. Having dissimilar friends affirms Weber and Mitchell's perception of "identities in the digital age as fragmented, shifting, and partial" (2008, p. 43). Web 2.0 services allow social identity to be more flexible and experimental. It is now possible for one's social groups to expand beyond that of church, school and neighborhood buddies. This expansion influences social identity because it opens the door for young people to encounter alternate ideas and beliefs. While, "close networks of strong ties tend to be homogenous and insular, reinforcing beliefs rather than introducing new ideas," having many loose ties within a network expands and challenges one's belief system (Donath, 2008, p. 237). Some social networking sites strengthen already held beliefs such as aSmallWorld, where membership is by invitation only, but the more popular sites encourage belief and identity exploration.

Social networking sites and other Web 2.0 tools help young individuals shape their identities during the transitional period of life. Young adulthood is a time for young individuals to "construct, deconstruct and reconstruct [themselves] in dialectical relationship with the world"

⁷ A bumper sticker is a Facebook application that lets users send images, often humorous with captions, to Facebook friends.

around them, by both people and material objects (Webber & Mitchell, 2008, p. 44). Web 2.0 services have become a part of this process because they are a primary medium for communication between peers, friends and family. Web 2.0 promotes the consumption and production of new ideas and information with the capability to respond and engage with these new viewpoints. Web 2.0 technology, as an evolving communication medium, has clearly influenced the way that young adults communicate, relate to each other and reflect on themselves. With such influence there are consequences.

The most interesting consequences of Web 2.0's influence on young adults' identity formation are those that reveal a change in social behavior. The remediation theory expressed how behavior changes as a result of shifting thoughts and subsequent identity adjustments. The most drastic change in social behavior that results from using Web 2.0 tools to develop one's identity is the way that young people blur the line between public and private. Web 2.0 services, such as Twitter, promote young adults to share details about life, normally considered private, as public knowledge (Thompson, 2008). Young bloggers, who use the service as a form of diary, post their deepest thoughts and emotions for the world to see. Normally, a diary is a private way of gathering one's thoughts, but because feedback has become critical for young adults, they share these thoughts and the world is free to respond (Harris, 2005, p. 53).

However, the private details that youngsters share are not always deep. Services like Facebook and Twitter promote sharing the mundane aspects of private life with one's entire circle of friends or followers (Morrissey, 2007). Facebook status updates and Twitter tweets⁸ are ways young people inform their friends of what they are doing or thinking, no matter how

⁸ A message sent to one's followers using the micro-blogging tool Twitter.

insignificant. While this behavior may seem strange to those who lack experience with these services, the interactive nature of many Web 2.0 services promotes this behavior because the young adults using the service feel as though they are the center of their online community (Porter, 2008, p. 16).

The egocentric nature of Web 2.0 services encourages young adults to use these self-expression tools for self-centered behavior. Siegel believes that Web 2.0 services like YouTube are making young adults hungry for attention, which he suggests has become “a new type of income” (2008, p. 55). Although young adults need to focus on themselves in order to become unique individuals, too much self-absorbed behavior produces individuals who are less considerate of others’ needs and are more likely to be disappointed when things do not work out as planned. The desire for attention prompts young adults, for the sake of popularity, to offer “themselves to an audience already familiar with their routines,” which have been established as successful (Siegel, 2008, p. 54). Self-expression for the sake of popularity lacks identity-forming rigor because such self-expression results in a more homogeneous youth culture. While the negative impacts of this behavior may not be evident at this time, Siegel believes that if young adults continue to use this technology only as a means of satisfying their personal self-interest, eventually the “world around them [will] shrink to [themselves] as the only reference point” (2008, p. 178).

While there is speculation about the negative behavioral consequences of Web 2.0’s influence on identity, positive consequences are considered as well. Using Web 2.0 services for identity exploration promotes interaction with others, and has the potential to foster behavior in young adults that is “more democratic, more creative, and more innovative than their parents’ generation” (Buckingham, 2008, p. 13). Following a wide variety of people on Twitter or having

a diverse network on other Web 2.0 services encourages young individuals to be more tolerant of others' beliefs because the alternate beliefs will become less unusual. Web 2.0's influence on identity may also be promoting more objective behavior in young adults. A service such as Twitter, while it may be egocentric, encourages a young individual to step back and look at life from a different perspective. Thompson found, after conducting a series of interviews with young people, "the act of stopping several times a day to observe what you're feeling or thinking can become, after weeks and weeks, a sort of philosophical act," which allows some users to look at their lives more impartially (2008). Taking a more objective view of life may enable young adults to deal with the ups and downs of life more effectively.

Although there are both positive and negative consequences of Web 2.0's influence on young adults' identity development, my personal stance on the issue is not one sided. Before I began researching this topic I knew little about the origins and effects of Web 2.0. My initial perception of Web 2.0 services, especially Facebook and YouTube, was slightly negative. I believed that the services were frivolous and took time away from people that they could be using for more productive endeavors. Now that I have completed my research, I realize there are positive aspects as well. Web 2.0, I believe, is still in the early stages of development making it difficult to determine whether the majority of the consequences are positive or negative. Since it cannot be determined, it is better to take a more neutral perspective on the technology. Despite the perceived negative consequences, there is always the opportunity to promote the use of these services in a new and exciting way that may lead to positive consequences. As the technology continues to change I believe that its impact on youth identity development will change with it.

In the end, no matter how these tools are used the outcome is subjective. The situation and the people using the services, which are always different, determine the perception of the

consequences. There will be creatively unique young people who use the services to truly express themselves and explore possible identities in hopes of discovering ones that seem fitting. There will also be young adults who just want to fit into the crowd and not produce things that are new or creative, but those people will be satisfied with just being popular. Web 2.0 services nourish identity development in young adults, but choosing whether or not to utilize the services to develop an identity independent of the crowd will determine the consequences of Web 2.0 use for each young person using these services.

Web 2.0 picked up speed in the early 21st century resulting in an altered culture. Web 2.0 sharply contrasts to the original Web model because of Web 2.0's higher levels of interactivity, and its more effective business function. Web 2.0's interactivity gives people the opportunity to create their own content and dynamically interact with the content created by members of their Web 2.0 networks. Users' new control over the communication medium results in a positive psychological experience prompting them to habitually use the service. Habitual use of Web 2.0 services by young adults results in a change in thought patterns, identity and ultimately social behavior, as revealed by the remediation theory. Today's youth are under the influence of Web 2.0, and the challenge will be encouraging them to use these services in a constructive way. Young adults already use Web 2.0 as a means of self-expression, which offers the opportunity to develop a unique identity. However, these services make it easy to follow the crowd resulting in more homogeneous identities. Web 2.0 can facilitate the spread of peace and prosperity for all by making today's youth well rounded and culturally tolerant individuals. However, this task can only be accomplished if today's young people are educated about their media use so they will be aware of the choice to use these tools for productive purposes.

References

- Baran, J. S., & Davis, K. D. (2000). *Mass Communication Theory: Foundations, ferment, and future*. Belmont, CA: Wadsworth.
- Buckingham, D. (Ed.). (2008). *Youth, Identity, and Digital Media*. Cambridge, MA: MIT Press.
- Buss, A. (2001). *Psychological Dimensions of the Self*. Thousand Oaks, CA: Sage Publications, Inc.
- Donath, J. (2007). Signals in social supernets. *Journal of Computer-Mediated Communication*, 13(1), 231-251.
- Harris, F.J. (2005). *I Found it on the Internet: Coming of age online*. Chicago: American Library Association.
- Jones, S., & Fox, S. (2009). Generations online in 2009. Pew Internet and American Life Project. Retrieved April 12, 2009 from <http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx>
- Kalyanaraman, S., & Sundar, S. S. (2006). The psychological appeal of personalized content in web portals: Does customization affect attitudes and behavior? *Journal of Communication*, 56(1), 110-132.
- Kelley, M. (2008). *Web 2.0 Mashups and Niche Aggregators*. O'Reilly Media, Inc. Retrieved February 26, 2009, from James Madison University, *Safari Books Online*: <http://proquestcombo.safaribooksonline.com:80/9780596514006>

Lenhart, A., Madden, M., Smith, A., & Macgill, A. (2007). Teens and social media. Pew Internet and American Life Project. Retrieved April 14, 2009 from <http://pewinternet.org/Reports/2007/Teens-and-Social-Media.aspx>

Liu, Y., & Shrum, L. J. (2002). What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of Advertising*, 31(4), 53-64.

Morrissey, B. (2007). The power of many. *MediaWeek*, 17(46), 12-14.

O'Reilly, T. (2005). *What is web 2.0?* Retrieved March 19, 2009, from <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>

Porter, J. (2008). *Designing for the Social Web*. New Riders. Retrieved March 2, 2009, from James Madison University *Safari Books Online*: <http://proquestcombo.safaribooksonline.com:80/9780321572981>

Shuen, A. (2008). *Web 2.0: A Strategy Guide*. O'Reilly Media Inc. Retrieved February 26, 2009, from James Madison University *Safari Books Online*: <http://proquestcombo.safaribooksonline.com:80/9780596529963>

Siegel, L. (2008). *Against the Machine: Being Human in the Age of an Electronic Mob*. New York, NY: Spiegel & Grau.

Thompson, C. (2008). Brave New World of Digital Intimacy. *The New York Times Magazine*.

Retrieved March 20, 2009, from

<http://www.nytimes.com/2008/09/07/magazine/07awareness-t.html>

Turner, C. (2008). "Spirals of Remediation." Class lecture, SMAD 301, Fall 2008, James Madison University.

Weber, S., & Mitchell, C. (2008) Imaging, keyboarding, and posting identities: Young people and new media technologies. In D. Buckingham (Ed.), *Youth Identity and Digital Media* (pp. 24 – 47). Cambridge, MA: MIT Press.